UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,207	06/27/2005	Levi Zruya	6553-007	7220

22440 7590 12/21/2010

GOTTLIEB RACKMAN & REISMAN PC
270 MADISON AVENUE
8TH FLOOR
NEW YORK, NY 10016-0601

EXAMINER	
FINDLEY, CHRISTOPHER G	

ART UNIT	PAPER NUMBER
2482	

MAIL DATE	DELIVERY MODE
12/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/521,207	ZRUYA ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER FINDLEY	2482	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 November 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16,20-29 and 31-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16,20-29 and 31-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1, 8-11, 15, 20, 23-24, 26-29, 31-33, and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 6970183 B1) in view of Hsu (US 6741744 B1) in view of Mercier (US 5953054 A).**

Re **claim 1**, Monroe discloses a method for the monitoring of an environment by use of one or more pairs of imagers, each imager monitoring said environment from a different angle of view, comprising the steps of: a) providing one or more pairs of imagers (Monroe: Fig. 7); b) positioning both imagers of said one or more pairs of imagers along a common vertical line such that they both capture a same object at a different angle of view (Monroe: column 17, line 62-column 2, each location has its own system node with a plurality of cameras); e) carrying out an unmanned, real-time vertical observation of said controlled space or sections thereof, according to the observation parameters (Monroe: column 29, lines 36-44); f) determining the distance to said observed objects from said one or more pairs of imagers (Monroe: column 28, lines 49-52, laser range finder); h) classifying a type and degree of danger of each of said observed objects by jointly processing said real-time data obtained from said stereoscopic observation with respect to the angle of view of each of said imagers, the path and size of, and distance

from, said observed objects, and said stored danger parameters (Monroe: column 9, lines 37-39 and column 30, lines 38-41, types of events are identified and classified so as to alert particular parties); and i) providing an indication when one or more of said observed objects is approaching said controlled space and has been classified as having a sufficiently high degree of danger so as to be liable of damaging an authorized body within said controlled space (Monroe: column 30, lines 7-32).

Monroe does not explicitly disclose that at least one of said pairs comprises an optical imager and at least one of said pairs comprises a Forward Looking Infra Red (FLIR) imager; performing a stereoscopic observation of objects; c) defining and storing in a memory, programs for processing, in real-time, photographic data to be obtained from the stereoscopic observation of objects by use of said one or more pairs of imagers; d) determining and storing parameters according to which the observation of a controlled space or sections thereof is effected; and g) evaluating the size of each of said observed objects. However, Hsu discloses a system including compilable language for extracting objects from an image using a primitive image map, wherein a computer program is executed to extract objects from an image (Hsu: column 10, lines 5-18), wherein the algorithm utilizes stereoscopic characteristics (Hsu: column 20, lines 17-23) and image and map data in FLIR applications (Hsu: column 3, lines 38-60) along with object size and other attributes (Hsu: Table I). Since both Monroe and Hsu relate to monitoring systems, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the principles of Hsu with the system of Monroe in order to eliminate the need for tedious pixel level calculations for object extraction (Hsu: column 10, lines 47-50).

Neither Monroe nor Hsu specifically discloses that the imagers are oriented vertically or that the images are located at a distance of 0.5 to 50 meters from each other in order to perform vertical stereoscopic observation. However, Mercier discloses a system for producing stereoscopic 3-dimensional images, wherein the cameras are separated by several meters within the limits of an aircraft fuselage in order to perform observation from an altitude of 1000 meters (Mercier: column 1, lines 28-40), further wherein utilizing alternating points of view that differ in vertical parallax to provide 3-dimensional images that can be viewed without glasses (Mercier: column 1, lines 40-59) is well known in the art. Since Monroe, Hsu, and Mercier all relate to monitoring systems, one of ordinary skill in the art at the time

of the invention would have found it obvious to include the aircraft mounted stereoscopic system described by Mercier with the system of Monroe and Hsu in order to provide a system capable of generating long range stereoscopic images in near real-time without the need for special glasses (Mercier: column 1, lines 56-60).

Re **claim 8**, Monroe discloses that the indication is an alarm signaling the presence and nature of any dangerous objects, the danger of collisions and possible desirable preventive actions (Monroe: column 18, lines 58-61, additional information including the type of event may be provided).

Re **claim 9**, Monroe discloses that the stereoscopic observation is carried out by performing the steps of: a) modifying the angle of one or more imagers (Monroe: column 28, lines 52-57, object tracking may include panning the camera); b) capturing one or more images with said one or more imagers (Monroe: column 4, lines 1-5, high resolution images and video clips are processed by the system); c) processing said captured one or more images by a computerized system (Monroe: column 4, lines 6-8, processors are used for automatic event assessment); and d) repeating steps a) to c) (Monroe: column 37, line 62-column 38, line 5, the cycle repeats).

Re **claim 10**, Monroe discloses that the stereoscopic observation is carried out as a continuous scan or segmental scan (Monroe: column 7, lines 50-56, the monitoring station can monitor the data continuously).

Re **claim 11**, Monroe discloses a) setting initial definition for the stereoscopic observation and for the processing of the data of said stereoscopic observation (Monroe: column 33, lines 12-23, the system is responsive to programmed events); b) storing in the memory the data that represent the last captured one or more images at a specific angle of the imagers (Monroe: column 33, lines 12-23, the system learns that an object belongs or does not belong at a specific location); and c) processing said data for detecting suspected objects, by performing, firstly, pixel processing and secondly, logical processing (Monroe: column 33, lines 12-23, the system recognizes objects and then determines whether they belong at a location); and d) deciding whether said suspected object is a dangerous object (Monroe: column 33, lines 12-23, detected changes signal an alarm).

Re **claim 15**, Monroe discloses that the logic processing comprises the steps of: a) measuring parameters regarding the pixels in the logic matrix (Monroe: column 33, lines 12-23, the system is capable of learning where objects are located by monitoring scenes over time); b) comparing said measured parameters to a predetermined table of values stored in the memory, whenever said measured parameters equal to one or more values in said table, the pixels that relates to said measurement are dangerous objects (Monroe: column 33, lines 19-20, any changes activate an alarm).

Re **claim 20**, Monroe discloses rotating both imagers of a pair of imagers and simultaneously changing their corresponding angle of view (Monroe: Fig. 40, rotation of the pole causes the cameras to rotate together).

Re **claim 23**, Monroe discloses a) generating a panoramic image and a map of the monitored area by scanning said area, said scanning being performed by rotating at least a pair of distinct and identical imagers around their central axis of symmetry (Monroe: column 28, lines 62-64, wide angle feature; Fig. 40, two cameras mounted); b) obtaining the referenced location of a detected object by observing said object with said imagers, said location being represented by the altitude, range and azimuth parameters of said object (Monroe: column 28, lines 46-47, GPS receiver provided for generating location information; column 28, line 64-column 29, line 2, range finder permits locating objects in a precise manner); and c) displaying the altitude value of said object on said panoramic image and displaying the range and the azimuth of said object on said map (Monroe: column 16, lines 14-15; column 23, lines 32-35, a portable device may display maps along with alphanumeric text).

Re **claim 24**, Monroe discloses that the imagers are selected from the group consisting of: optical imagers, thermal imagers, CCD cameras, CMOS based cameras, and Forward Looking Infra Red (FLIR) cameras (Monroe: column 6, lines 5-8).

Re **claim 26**, Monroe discloses that the imagers are not identical and do not share common central axis of symmetry or of optical magnification but have at least an overlapping part of their field of view (Monroe: Fig. 40, infrared sensor 562 and camera 558).

Re **claim 27,** Monroe discloses documenting the activities of the wildlife and other dangerous objects, for preventing and reducing from said wildlife and said other dangerous objects to appear at the monitored area (Monroe: column 4, lines 6-8, response to an alarm event may include the dispatch of response personnel).

Claim 28 recites the corresponding apparatus for implementing the method of claim 1, and therefore claim 28 has been analyzed and rejected with respect to claim 1 above.

Re **claim 29**, Monroe discloses that the imagers are photographic devices selected from the group consisting of: CCD or CMOS cameras, infrared cameras, and Forward Looking Infra Red (FLIR) cameras (Monroe: column 6, lines 5-8).

Re **claim 31**, Monroe discloses that both imagers of a pair of imagers are identical (Monroe: Fig. 40; column 27, lines 11-24).

Re **claim 32,** Monroe discloses that both imagers of a pair of imagers are provided with a different lens (Monroe: Fig. 40, separate cameras).

Re **claim 33**, Monroe discloses a) elaborator means for obtaining the referenced location of a detected object in said controlled space, said location being represented by the altitude, range and azimuth parameters of said object (Monroe: column 28, lines 46-47, GPS receiver provided for generating location information; column 28, line 64-column 29, line 2, range finder permits locating objects in a precise manner); b) means for generating a panoramic image and a map of the monitored area (Monroe: column 28, lines 62-64, wide angle feature); c) means for displaying the altitude value of said object on said panoramic image and means for displaying the range and the azimuth of said object on said map (Monroe: column 16, lines 14-15; column 23, lines 32-35, a portable device may display maps along with alphanumeric text).

Re **claim 35**, Monroe discloses that the elaborator means comprise one or more dedicated algorithm installed within a computerized system (Monroe: column 31, lines 37-56, instructions stored).

Re **claim 36**, Monroe discloses a laser range finder being electrically connected to a computerized system for measuring the distance of a detected object from said laser range finder, said laser range finder transfers to said computerized system data representing the distance from a detected object, thereby aiding said computerized system to obtain the location of said detected object (Monroe: column 28, line 64-column 29, line 2, range finder permits locating objects in a precise manner).

Re **claim 37**, Monroe discloses procuring, adjourning and storing in a memory files representing a background space (Monroe: column 33, lines 12-23, the system is capable of learning where objects are located by monitoring scenes over time).

Re **claim 38**, Monroe discloses a set of motors for displacing the imagers, for changing the controlled space or sections thereof, and for thereby generating the real-time photographic data (Monroe: Fig. 40 and column 27, line 66-column 27, line 17).

3. Claims 2, 3, 5-7, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 6970183 B1) in view of Hsu (US 6741744 B1) in view of Lipton (US 6954498 B1).

Re **claim 2**, Monroe discloses a) changing the sections of said stereoscopic observation so as to monitor the path of any detected dangerous objects (Monroe: column 28, lines 52-59, tracking); b) receiving and storing the data defining the positions and the foreseen future path of all authorized bodies (Monroe: column 28, lines 8-15); and d) comparatively processing said assumed future path with the foreseen future path of all authorized bodies, to determine the possible danger of collision or intrusion (Monroe: column 34, lines 56-64, deviations from a pattern trigger an alarm).

Monroe does not specifically disclose c) extrapolating the data obtained by monitoring the path of any detected dangerous objects to determine an assumed future path of said objects. However, Lipton discloses an interactive video manipulation system, wherein positions are predicted from a tracking algorithm (Lipton: column 7, lines 27-37). Since Monroe and Lipton both relate to surveillance, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the prediction

of Lipton with the system of Monroe in order to facilitate the tracking of multiple objects in a frame (Lipton: column 7, lines 14-26).

Re **claim 3**, Monroe discloses determining an action on dangerous objects that will eliminate the danger of collision, intrusion or damage (Monroe: column 4, lines 43-57, response to an alarm event).

Re **claim 5**, Monroe does not disclose that the action is change in their assumed future path the dangerous object. However, Lipton discloses that the predicted position is compared to the actual position to determine a more accurate predicted path (Lipton: column 7, lines 27-37). Since Monroe and Lipton both relate to surveillance, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the prediction of Lipton with the system of Monroe in order to facilitate the tracking of multiple objects in a frame (Lipton: column 7, lines 14-26).

Re **claim 6**, Monroe discloses determining an action on an authorized body that will eliminate the danger of collision, intrusion or damage (Monroe: column 4, lines 6-8, response to an alarm event may include the dispatch of response personnel).

Re **claim 7**, neither Monroe nor Lipton specifically discloses that the action is a delay in the landing or take-off of an aircraft or a change of the landing or take-off path of said aircraft. However, the Examiner takes Official Notice that one of ordinary skill in the art at the time of the invention would have found it obvious that in the event that a hazardous item endangered an aircraft's take-off or landing, appropriate diversionary measures would be taken to eliminate possible threats to the aircraft, passengers, and/or cargo.

Re **claim 14**, Monroe does not specifically disclose the claimed features. However, Lipton discloses a) generating an average image from the current one or more images (Monroe: column 33, lines 12-23, the system learns that an object belongs or does not belong at a specific location and recognizes whether the objects in a frame belong there); b) generating a derivative matrix from said average image for emphasizing relatively small objects at each image from said one or more images, which might be potential dangerous objects (Lipton: column 5, lines 41-60); c) storing said derivative matrix in the memory as part of an image database, and comparing said derived matrix with a previous

derivative matrix stored in said memory as part of said image database, said previous derivative matrix being derived from one or more images that was taken from the exact imager angle as of said average image (Lipton: column 5, lines 41-60); d) from the comparison, generating an error image, wherein each pixel in said error image represents the error value between said derivative matrix and said previous derivative matrix (Lipton: column 5, lines 41-60); e) comparing the value of each pixel from said error image to a threshold level, said threshold level being dynamically determined to each pixel in the error image statistically according the previous pixel values stored in the memory as a part of a statistic database (Lipton: column 5, line 61-column 6, line 18); f) whenever a pixel value in said error image exceeds said threshold level, generating a logic matrix in which the location of said pixel value is set to a predetermined value (Lipton: column 5, line 61-column 6, line 18); and g) upon completing comparing each error value to said threshold level, for the entire current images, transferring said generated logic matrix to the logic process stage (Lipton: column 6, lines 41-44, pixels are clustered into regions of interest). Since Monroe and Lipton both relate to surveillance, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the prediction of Lipton with the system of Monroe in order to facilitate the tracking of multiple objects in a frame (Lipton: column 7, lines 14-26).

Re **claim 16,** Monroe does not specifically disclose the claimed features. However, Lipton discloses that the parameters are selected from the group consisting of the dimension of an adjacent group of pixels, the track that one or more adjacent pixels created in the logic matrix, direction, speed, size and location of an object that is created from a group of pixels (Lipton: column 7, lines 27-37). Since Monroe and Lipton both relate to surveillance, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the prediction of Lipton with the system of Monroe in order to facilitate the tracking of multiple objects in a frame (Lipton: column 7, lines 14-26).

4. Claims 18, 21, 22, 25, 30, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 6970183 B1) in view of Hsu (US 6741744 B1) in view of Mercier (US 5953054 A) in view of Milgram et al. (US 5175616 A, hereinafter referred to as "Milgram").

Re **claim 18**, Monroe does not specifically disclose the claimed features. However, Milgram discloses that the camera separation affects the focal point of the imaging system, wherein by adjusting the camera configuration to meet the needs of the operator, the task of the operator is theoretically facilitated (Milgram: Figs. 11A-11E and column 28, line 35 through column 29, line 3). Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious that a distance of 0.5 to 50 meters between cameras would simply be categorized as a design choice by the operator for facilitating his needs. Since Monroe and Milgram relate to surveillance systems, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stereoscopic coordinate system of Milgram with the system of Monroe in order to provide enhanced 3-D interaction from the operator (Milgram: column 3, lines 41-60 and column 4, lines 10-29).

Re **claim 21**, Monroe discloses providing at least one encoder and at least one reset sensor for determining the angle of each imager, said encoder and reset sensor being provided to each axis that rotates an imager (Monroe: Fig. 55 and column 37, lines 44-49, encoder 1044; column 4, lines 36-40, the system may be configured and reconfigured).

Re **claim 22**, Monroe discloses that the reset sensor provides the initiation angle of the imager at the beginning of the scanning of a sector and the encoder provides the current angle of the imager during the scanning of the sector (Monroe: column 4, lines 36-40, the system may be configured and reconfigured).

Claim 25 has been analyzed and rejected with respect to claim 18 above.

Claim 30 has been analyzed and rejected with respect to claim 18 above.

Re **claim 34**, Monroe does not specifically disclose that the means for displaying the monitored area comprise three-dimensional software graphics for indicating the location of each detected object as a three-dimensional image. However, Milgram discloses a stereoscopic video-graphic coordinate specification system, wherein stereoscopic video is employed in remote surveillance systems to generate 3-D information (Milgram: column 1, lines 5-10 and column 3, line 63-column 4, line 2). Since Monroe

and Milgram relate to surveillance systems, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stereoscopic coordinate system of Milgram with the system of Monroe in order to provide enhanced 3-D interaction from the operator (Milgram: column 3, lines 41-60 and column 4, lines 10-29).

5. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 6970183 B1) in view of Hsu (US 6741744 B1) in view of Mercier (US 5953054 A) in view of Lipton (US 6954498 B1) in view of Milgram et al. (US 5175616 A, hereinafter referred to as "Milgram").

Re **claim 12**, Monroe does not specifically disclose that the pixel processing comprises the step of: a) mathematically processing each pixel in a current photo for detecting suspected objects. However, Lipton discloses performing a sum of absolute differences (SAD) (Lipton: column 7, lines 38-51, sum of absolute differences (SAD) performed), wherein each pixel in a block is compared to the corresponding pixel in another block, and the differences are summed. Since Monroe and Lipton both relate to surveillance, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the prediction of Lipton with the system of Monroe in order to facilitate the tracking of multiple objects in a frame (Lipton: column 7, lines 14-26).

Neither Monroe nor Lipton specifically discloses that b) whenever a suspected object is detected, providing images at the same time period and of the same monitored section by means of both imagers of the one or more pairs of imagers, for generating three dimensional data related to said suspected object. However, Milgram discloses a stereoscopic video-graphic coordinate specification system, wherein stereoscopic video is employed in remote surveillance systems to generate 3-D information (Milgram: column 1, lines 5-10 and column 3, line 63-column 4, line 2). Since Monroe, Lipton, and Milgram relate to surveillance systems, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stereoscopic coordinate system of Milgram with the system of

Monroe and Lipton in order to provide enhanced 3-D interaction from the operator (Milgram: column 3, lines 41-60 and column 4, lines 10-29).

Re **claim 13**, Monroe discloses that whenever the pixel processing detects a moving object, further comprising the steps of: a) comparing the current images to an average image generated from the previous stored images, said previous stored images and said current image being captured at the same imager angle (Monroe: column 33, lines 12-23, the system learns that an object belongs or does not belong at a specific location and recognizes whether the objects in a frame belong there).

Monroe does not specifically disclose b) generating a comparison image from the difference in the pixels between said average image said current image, each pixel in said comparison image representing an error value; c) comparing each error value to a threshold level, said threshold level being dynamically determined to each pixel in the image matrix statistically according the previous pixel values stored in the memory as a statistic database; d) whenever a pixel value in said comparison image exceeds said threshold level, generating a logic matrix in which the location of said pixel value is set to a predetermined value; and e) upon completing comparing each error value to said threshold level, for the entire current images, transferring said generated logic matrix to the logic process stage. However, Lipton discloses b) generating a comparison photo from the difference in the pixels between said average photo said current photo, each pixel in said comparison photo represents an error value (Lipton: column 5, lines 41-60); c) comparing each error value to a threshold level, said threshold level is dynamically determined to each pixel in the photo matrix statistically according the previous pixel values stored in the memory as a statistic database (Lipton: column 5, lines 41-60); d) whenever a pixel value in said comparison photo exceeds said threshold level, generating a logic matrix in which the location of said pixel value is set to a predetermined value (Lipton: column 5, line 61-column 6, line 18); and e) upon completing comparing each error value to said threshold level, for the entire current photos, transferring said generated logic matrix to the logic process stage (Lipton: column 6, lines 41-44, pixels are clustered into regions of interest). Since Monroe and Lipton both relate to surveillance, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the prediction of Lipton with the

system of Monroe in order to facilitate the tracking of multiple objects in a frame (Lipton: column 7, lines 14-26).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 6970183 B1) in view of Hsu (US 6741744 B1) in view of Mercier (US 5953054 A) in view of Goldenberg et al. (US 6113343 A, hereinafter referred to as "Goldenberg").

Re **claim 4**, neither Monroe nor Lipton discloses that the action is the destruction of the dangerous object. However, Goldenberg discloses an explosives disposal robot, which uses surveillance techniques to locate and approach, ultimately destroying, hazardous items (Goldenberg: Abstract section). Since Monroe, Lipton, and Goldenberg use surveillance techniques, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the destructive property of Goldenberg with the system of Monroe and Lipton in order to safely assist in explosive ordinance disposal without endangering humans.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER FINDLEY whose telephone number is (571)270-1199. The examiner can normally be reached on Monday-Friday (8:30 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2482

/Christopher Findley/